64. A pharmaceutical composition comprising two adenovirus vectors, wherein each vector comprises a nucleic acid encoding a different neurotrophic factor.

65. (amended) The pharmaceutical composition according to claim 64, wherein the vectors comprise an expression cassette for the simultaneous expression of two different neurotrophic factors.

66. The pharmaceutical composition according to claim 64, wherein the neurotrophic factors are selected from GDNF, BDNF, CNTF and NT3.

67. (amended) The pharmaceutical composition according to claim 66, wherein the adenovirus vectors are two replication defective recombinant adenoviruses, and wherein one adenovirus comprises a nucleic acid encoding CNTF and one adenovirus comprises a nucleic acid encoding GDNF.

68. (amended) The pharmaceutical composition according to claim 66, wherein the adenovirus vectors are two replication defective recombinant adenoviruses, and wherein one adenovirus comprises a nucleic acid encoding GDNF and one adenovirus comprises a nucleic acid encoding NT3.

69. (amended) The pharmaceutical composition according to claim 66, wherein the adenovirus vectors are two replication defective recombinant adenoviruses, and wherein one adenovirus comprises a nucleic acid encoding BDNF and one adenovirus comprises a nucleic acid encoding NT3.

70. The pharmaceutical composition according to claim 64, in an injectable form.

71. The pharmaceutical composition according to claim 64, further comprising riluzole.

72. The pharmaceutical composition according to claim 71, in an injectable form.

73. The pharmaceutical composition of claim 64, wherein one of the neurotrophic factors is CNTF.

74. The pharmaceutical composition of claim 64, wherein one of the neurotrophic factors is BDNF.

75. (amended) The pharmaceutical composition of claim 64, wherein at least one adenovirus vector is a replication defective recombinant adenovirus vector.

76. (new) A method of treating amyotrophic lateral sclerosis comprising administering to a subject by systemic administration a pharmaceutical composition comprising an adenovirus vector comprising a nucleic acid encoding a neurotrophic factor, wherein the treatment results in a reduction in progressive motor neuron degeneration in said subject.

77. (new) A method of treating amyotrophic lateral sclerosis comprising administering to a subject by systemic administration a pharmaceutical composition comprising an adenovirus vector comprising a nucleic acid encoding a neurotrophic factor, wherein the treatment results in a reduction in progressive denervation in said subject.

78. (new) The method of claim 76, wherein the reduction in progressive motor neuron degeneration is detectable by a change in the rate of loss of the number of myelinized fibers in a peripheral nervous tissue.

79. (new) The method of claim 77, wherein the reduction in progressive denervation is detectable by electromyography.

80. (new) The method of claim 76, wherein the adenovirus vector comprises an expression cassette comprising a nucleic acid encoding a neurotrophic factor under the control of a transcriptional promoter.

81. (new) The method of claim 77, wherein the adenovirus vector comprises an expression cassette comprising a nucleic acid encoding a neurotrophic factor under the control of a transcriptional promoter.

82. (new) The method of claim 78, wherein the adenovirus vector comprises an expression cassette comprising a nucleic acid encoding a neurotrophic factor under the control of a transcriptional promoter.

83. (new) The method of claim 79, wherein the adenovirus vector comprises an expression cassette comprising a nucleic acid encoding a neurotrophic factor under the control of a transcriptional promoter.

84. (new) The method of claim 76, wherein the adenovirus vector comprises two expression cassettes, wherein each cassette comprises a nucleic acid encoding a different neurotrophic factor under the control of a transcriptional promoter.

85. (new) The method of claim 77, wherein the adenovirus vector comprises two expression cassettes, wherein each cassette comprises a nucleic acid encoding a different neurotrophic factor under the control of a transcriptional promoter.

86. (new) The method of claim 78, wherein the adenovirus vector comprises two expression cassettes, wherein each cassette comprises a nucleic acid encoding a different neurotrophic factor under the control of a transcriptional promoter.

87. (new) The method of claim 79, wherein the adenovirus vector comprises two expression cassettes, wherein each cassette comprises a nucleic acid encoding a different neurotrophic factor under the control of a transcriptional promoter.

88. (new) The method of claim 76, wherein the neurotrophic factor is GDNF, CNTF, BDNF or NT3.

89. (new) The method of claim 77, wherein the neurotrophic factor is GDNF, CNTF, BDNF or NT3.

90. (new) The method of claim 78, wherein the neurotrophic factor is GDNF, CNTF, BDNF or NT3.

91. (new) The method of claim 79, wherein the neurotrophic factor is GDNF, CNTF, BDNF or NT3.

92. (new) The method of claim 76, wherein the adenovirus vector comprises an expression cassette comprising two nucleic acid sequences, wherein each nucleic acid sequence encodes a different neurotrophic factor under the control of a single transcriptional promoter.

93. (new) The method of claim 92, wherein the neurotrophic factors are selected from GDNF, CNTF, BDNF and NT3.

94. (new) The method of claim 93, wherein the neurotrophic factors are CNTF and GDNF.

95. (new) The method of claim 92, wherein the transcriptional promoter is a constitutive eucaryotic or viral promoter.

96. (new) The method of claim 95, wherein the promoter is selected from a CMV, RSV, or adenovirus promoter.

97. (new) The method of claim 76, wherein the systemic administration comprises intravenous administration.

98. (new) The method of claim 77, wherein the systemic administration comprises intravenous administration.

99. (new) The method of claim 78, wherein the systemic administration comprises intravenous administration.

100. (new) The method of claim 79, wherein the systemic administration comprises intravenous administration.

101. (new) The method of claim 76, further comprising administering riluzole.

102. (new) The method of claim 77, further comprising administering riluzole.

103. (new) The method of claim 78, further comprising administering riluzole.

104. (new) The method of claim 79, further comprising administering riluzole.

105. (new) The method of claim 84, further comprising administering riluzole.

106. (new) The method of claim 85, further comprising administering riluzole.

107. (new) The method of claim 88, further comprising administering riluzole.

108. (new) The method of claim 89, further comprising administering riluzole.

109. (new) A method of treating amyotrophic lateral sclerosis comprising administering to a subject by systemic administration a pharmaceutical composition comprising an adenovirus vector comprising a nucleic acid encoding a neurotrophic factor, wherein the treatment results in increased lifespan for said subject.

110. (new) The method of claim 109, wherein the adenovirus vector comprises an expression cassette comprising a nucleic acid encoding a neurotrophic factor under the control of a transcriptional promoter.

111. (new) The method claim 109, wherein the adenovirus vector comprises two expression cassettes, wherein each cassette comprises a nucleic acid encoding a different neurotrophic factor under the control of a transcriptional promoter.

112. (new) The method of claim 109, wherein the neurotrophic factor is one of GDNF, CNTF, BDNF or NT3.

113. (new) The method of claim 109, wherein the adenovirus vector comprises an expression cassette comprising two nucleic acid sequences, wherein each nucleic acid sequence encodes a different neurotrophic factor under the control of a single transcriptional promoter.

114. (new) The method of claim 111, wherein the neurotrophic factors are selected from GDNF, CNTF, BDNF and NT3.

115. (new) The method of claim 111, wherein the neurotrophic factors are CNTF and GDNF.

116. (new) The method of claim 110, wherein the transcriptional promoter is a constitutive eucaryotic or viral promoter.

117. (new) The method of claim 116, wherein the promoter is selected from a CMV, RSV, or adenovirus promoter.

118. (new) The method of claim 109, wherein the neurotrophic factor is CNTF.

119. (new) The method of claim 109, wherein the neurotrophic factor is GDNF.

120. (new) The method of claim 109, wherein the neurotrophic factor is BDTF

121. (new) The method of claim 109, wherein the neurotrophic factor is NT3.

122. (new) The method of claim 109, further comprising administering riluzole.

123. (new) The method of claim 111, further comprising administering riluzole.

124. (new) The method of claim 112, further comprising administering riluzole.

125. (new) The method of claim 109, wherein the systemic administration comprises intravenous administration.

126. (new) The method of claim 111, wherein the systemic administration comprises intravenous administration.

127. (new) The method of claim 112, wherein the systemic administration comprises intravenous administration.

128. (new) The method of claim 122, wherein the systemic administration comprises intravenous administration.